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Application Number		10/692,020	
Filing Date		October 22, 2003	
First Named Inventor		Mark N. Billinghurst	
	TRACKING A SURFACE IN A 3-		
		ONAL SCENE USING NATURAL	
Title	VISUAL FEATURES OF THE SURFACE		
Art Unit		2621	
Examiner Name		Not Yet Assigned	
Attorney Docket No.		371818001US1	

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	$ \nabla $	Applicant/ Assignee	Inventor. of record of the entire				
					ent or Assignee of Record	1	
	Nam	ne	Mark Nathan Billin	~			
		ature	M. Billyon			/ l. ==	n
1165	Date		3/3/2004			64-27	
NOT form:	E: Sign s if mor	atures of a e than one	Il the inventors or assigne signature is required, see	ees of record of the e e below*.	entire interest or their representa	tive(s) are requ	uired. Submit multiple
	x	*Tota!	of <u>1</u> form	is are submitted.			

STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: Billinghurst et al.
Application No./Patent No.: 10/692,020 Filed/Issue Date: October 22, 2003
TRACKING A SURFACE IN A 3-DIMENSIONAL SCENE USING NATURAL VISUAL Entitled: FEATURES OF THE SURFACE
ARToolWorks, Inc. , a Corporation  (Name of Assignee) , a Corporation (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is:
1. X the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is %
in the patent application/patent identified above by virtue of either:
A. [x] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, respectively.
OR
B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
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3. From:
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Reel , Frame , or for which a copy thereof is attached.
[ ] Additional documents in the chain of title are listed on a supplemental sheet.
[ ] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]  The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.
3/3/2004 Mark Nathan Billinghurst  Date Typed or printed name
Date Typed or printed name
+64-27-444-0595 M Billiphut
Telephone Number Signature
Authorized Signer for Assignee Title

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV336678035US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. Signature:

#### **ASSIGNMENT BY INVENTORS**

THIS ASSIGNMENT, made this 3rd day of March, 2004 by Mark N. Billinghurst, residing at 73A Wharenui Road, Christchurch 82004, NEW ZEALAND, and Hirokazu Kato, residing at 14-1-1237 Hirakata-Kaminocho, Hirakata, Osaka, 573-0037, JAPAN (hereinafter referred to as Assignors);

WHEREAS, Assignors have invented certain new and useful improvements in TRACKING A SURFACE IN A 3-DIMENSIONAL SCENE USING NATURAL VISUAL FEATURES OF THE SURFACE, set forth in a Patent application for Letters Patent of the United States, already filed on October 22, 2003 as U.S. Application No. 10/692,020; and

WHEREAS, ARToolWorks, Inc., a Corporation organized under and pursuant to the laws of Washington having its principal place of business at 8239-23rd Avenue N.E., Seattle, Washington 98115 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order

to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

### PERKINS COIE LLP

All practitioners at Customer Number 25096 (listed here):

Stephen E. Arnett	47,392	Steven S. Kelley	43,449	Michelle C. Sarruf	55,828
Bret A. Bocchieri	31,739	Jonathan P. Kudla	47,724	Tim R. Seeley	53,575
Rodger K. Carreyn	50,774	Steven D. Lawrenz	37,376	Lauren C. Sliger	51,086
Brian R. Coleman	39,145	Jacqueline F. Mahoney	48,390	Carina M. Tan	45,769
Christopher J. Daley-	34,807	Shaalu Mehra	44,934	Mark A. Thomas	37,953
Peter J. Dehlinger	28,006	Judy M. Mohr	38,563	Larry W. Thrower	47,994
David P. Devlin	55,876	Chun M. Ng	36,878	Glenn E. Von Tersch	41,364
David B. Dort	50,213	Kenneth H. Ohriner	31,646	John M. Wechkin	42,216
David T. Dutcher	51,638	Paul T. Parker	38,264	James A.D. White	43,985
Leeann Gorthey	37,337	Maurice J. Pirio	33,273	Michael J. Wise	34,047
Joseph P. Hamilton	51,770	Aaron J. Poledna	54,675	Robert G. Woolston	37,263
Paul L. Hickman	28,516	Rajiv P. Sarathy	55,592	James J. Zhu	52,396
Edward S. Hotchkiss	33,904				

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

This Assignment may be executed in counterparts.

Mark N. Billinghurst

Hirokazu Kato

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All practitioners at Customer Number 25096 (listed here):

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	31,739 50,774 39,145 34,807 28,006 55,876 50,213 51,638 37,337 51,770 28,516	31,739 Jonathan P. Kudla 50,774 Steven D. Lawrenz 39,145 Jacqueline F. Mahoney 34,807 Shaalu Mehra 28,006 Judy M. Mohr 55,876 Chun M. Ng 50,213 Kenneth H. Ohriner 51,638 Paul T. Parker 37,337 Maurice J. Pirio 51,770 Aaron J. Poledna 28,516 Rajiv P. Sarathy	31,739       Jonathan P. Kudla       47,724         50,774       Steven D. Lawrenz       37,376         39,145       Jacqueline F. Mahoney       48,390         34,807       Shaalu Mehra       44,934         28,006       Judy M. Mohr       38,563         55,876       Chun M. Ng       36,878         50,213       Kenneth H. Ohriner       31,646         51,638       Paul T. Parker       38,264         37,337       Maurice J. Pirio       33,273         51,770       Aaron J. Poledna       54,675         28,516       Rajiv P. Sarathy       55,592	31,739         Jonathan P. Kudla         47,724         Tim R. Seeley           50,774         Steven D. Lawrenz         37,376         Lauren C. Sliger           39,145         Jacqueline F. Mahoney         48,390         Carina M. Tan           34,807         Shaalu Mehra         44,934         Mark A. Thomas           28,006         Judy M. Mohr         38,563         Larry W. Thrower           55,876         Chun M. Ng         36,878         Glenn E. Von Tersch           50,213         Kenneth H. Ohriner         31,646         John M. Wechkin           51,638         Paul T. Parker         38,264         James A.D. White           37,337         Maurice J. Pirio         33,273         Michael J. Wise           51,770         Aaron J. Poledna         54,675         Robert G. Woolston           28,516         Rajiv P. Sarathy         55,592         James J. Zhu

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

This Assignment may be executed in counterparts.

Mark N. Billinghurst

Hirokazu Kato

# WITNESSES TO SIGNATURE BY Mark N. Billinghurst

1.	Signature Miranda Hogan Print Name IIR Finnsarby Pl Address Address Address	3/03/04 Date/
2.	Signature THOMAS Q. FVEN ISS  Print Name  394 HAMILTIN AVE  Address  CHRISTCHVILLE NT  Address	3/03/04- Date

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	Declaration for Patent Application	Attorney Docket No.	371818001US1		
SIPE	English Language Declaration	First Named Inventor	Mark N. Billinghurst		
\Q. \Q	Linguish Language Declaration	COMPLETE IF KNOWN:			
2000	iii	Application No.	10/692,020		
3 MAR 1 6 2004	Submitted x Submitted after initial	Filing Date	October 22, 2003		
Ť.	with initial filing (surcharge required	Art Unit	N/A		
ALS LOVCEMBE	filing 37 CFR 1.16(e))	Examiner	Not Yet Assigned		
MAR					
r	As a below named inventor, I hereby declare that:				
	My residence, mailing address and citizenship a	re as stated below next	to my name.		
	believe I am the original, first and sole inventor (if only one name is listed below) or an original, first nd joint inventor (if plural names are listed below) of the subject matter which is claimed and for which patent is sought on the invention entitled:				
	TRACKING A SURFACE IN A 3-DIMENSIONAL THE SURFACE	SCENE USING NATUR	RAL VISUAL FEATURES OF		
	the specification of which				
	is attached hereto				
	OR				
	x was filed on 10/22/2003		•		
	as United States Application No. or PCT In and was amended on	nternational Application I (if applicable).			
	and was afficiated off	(ii applicable).			
	I hereby state that I have reviewed and understa including the claims, as amended by any amend		bove-identified specification,		
	I acknowledge the duty to disclose information v 1.56, including for continuation-in-part applicatio between the filing date of the prior application ar continuation-in-part application.	ns, material information	which became available		
	I hereby claim foreign priority benefits under 35 applications(s) for patent, inventor's or plant bre international application which designated at lea listed below and have also identified below, by cinventor's or plant breeder's right certificate(s), to before that of the application on which priority is	eder's rights certificate(s ist one country other than thecking the box, any for or any PCT international	), or 365(a) of any PCT n the United States of America, eign application for patent,		
.	Prior Foreign Application(s)		Priority Certified Not Copy Claimed Attached YES NO		
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		(511)			
	(Number) (Country)	(Filing Date	<del>=</del> )		
	(Number) (Country)	(Filing Date			
	Additional prior foreign applications are lis	ted on a supplemental d	ata sneet attached hereto.		

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor	
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hereby certify that this correspondence is being deposited with the U.S. Postal Service a an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22	s Express Mail, Airbill No. EV336678035US, in 2313-1450, on the date shown below.
Dated: 3/16/2004 Signature: 1000000000000000000000000000000000000	(Sandy Reisman)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor	<del></del>
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Full name of second inventor	
Hirokazu Kato Second inventor's signature	Date
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Dated: 3/16/2004

Signature:

(Sandy Reisman)